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**UNITED STATES DISTRICT COURT
 FOR THE NORTHERN DISTRICT OF CALIFORNIA**

PACIFIC COAST FEDERATION OF FISHERMEN'S)
 ASSOCIATIONS; INSTITUTE FOR FISHERIES)
 RESOURCES; GOLDEN STATE SALMON)
 ASSOCIATION; NATURAL RESOURCES DEFENSE)
 COUNCIL, INC.; DEFENDERS OF WILDLIFE; and)
 BAY.ORG d/b/a THE BAY INSTITUTE,)

Plaintiffs,)

v.)

WILBUR ROSS, in his official capacity as Secretary of)
 Commerce; CHRIS OLIVER, in his official capacity as)
 Assistant Administrator for Fisheries at the National)
 Oceanic and Atmospheric Administration; NATIONAL)
 MARINE FISHERIES SERVICE; DAVID)
 BERNHARDT, in his official capacity as Secretary of the)
 Interior; MARGARET EVERSON, in her official capacity)
 as Acting Director, U.S. Fish and Wildlife Service; and)
 U.S. FISH AND WILDLIFE SERVICE,)

Defendants.)

**COMPLAINT FOR
 DECLARATORY AND
 INJUNCTIVE RELIEF**

Administrative Procedure
 Act Case

Case No. 19-7897

INTRODUCTION

1
2 1. This is an environmental and administrative law action brought by Plaintiffs
3 Pacific Coast Federation of Fishermen’s Associations, Institute for Fisheries Resources, Golden
4 State Salmon Association, Natural Resources Defense Council, Inc., Defenders of Wildlife, and
5 Bay.org d/b/a The Bay Institute (“Plaintiffs”) against the National Marine Fisheries Service and
6 the U.S. Fish and Wildlife Service, and their official representatives, challenging final agency
7 actions—the adoption by each agency of a biological opinion regarding the long-term operation
8 of the Central Valley Project and State Water Project (collectively, “Water Projects”)—that are
9 arbitrary, capricious, and not in accordance with law in violation of the Administrative Procedure
10 Act, 5 U.S.C. §706. Contrary to the requirements of the Endangered Species Act, 16 U.S.C.
11 §1531, *et seq.*, the biological opinions at issue in this case were blatantly and improperly shaped
12 by political motivations and authorize Water Project operations that will cause grave harm to
13 species and their critical habitat, increasing the risk of extinction of endangered and threatened
14 salmon, steelhead, and Delta Smelt.

15 2. The Central Valley Project and the State Water Project, operated by the federal
16 Bureau of Reclamation (“Reclamation”) and the state of California’s Department of Water
17 Resources, respectively, are two of the largest water projects in the country. These Water
18 Projects operate a vast system of dams, reservoirs, canals, and pumping facilities to divert
19 massive amounts of water from the Sacramento and San Joaquin River systems and the fragile
20 San Francisco Bay/Sacramento-San Joaquin River Delta (the “Delta”), primarily for agricultural
21 and municipal uses in California’s Central Valley and southern California.

22 3. The operations of the Water Projects have caused devastating environmental
23 impacts and have contributed to severe declines in California’s native fish species, several of
24 which are now listed as endangered or threatened species under the Endangered Species Act.
25 Specifically, Water Project operations have been major factors in the decline of the endangered
26 Sacramento River winter-run Chinook salmon (“winter-run Chinook salmon”), threatened
27 Central Valley spring-run Chinook salmon (“spring-run Chinook salmon”), threatened Central
28

1 Valley steelhead, and threatened Delta Smelt, and in the listing of these and other species under
2 the Endangered Species Act.

3 4. The Water Projects are currently authorized to kill a limited number of threatened
4 and endangered species pursuant to biological opinions issued in 2008 by the U.S. Fish and
5 Wildlife Service and in 2009 by the National Marine Fisheries Service. In August 2016, the
6 National Marine Fisheries Service and the U.S. Fish and Wildlife Service concluded that
7 reinitiation of consultation was required under the Endangered Species Act regarding the effects
8 of Water Project operations on listed species, in part because of data showing the increasingly
9 imperiled state of the Delta Smelt and its designated critical habitat and extremely low
10 abundance levels of winter-run and spring-run Chinook salmon. That same month, the Secretary
11 of the Interior Department concluded that the protections in those 2008 and 2009 biological
12 opinions must be increased to avoid causing the extinction of Delta Smelt and winter-run
13 Chinook salmon, and that increased protections for endangered and threatened species would
14 likely result in reduced water diversions from the Delta.

15 5. In January 2019, Reclamation issued a biological assessment outlining and
16 assessing a proposed new operating plan for the Water Projects. Reclamation's proposed Water
17 Project operations plan would substantially increase diversions from the Sacramento and San
18 Joaquin River watersheds, including significantly increasing pumping of water from the Delta
19 for export to the Central Valley and southern California, and would weaken or eliminate
20 operational requirements in the 2008 and 2009 biological opinions that were designed to protect
21 listed fish populations.

22 6. This new plan would have a significant impact on the Sacramento River and San
23 Joaquin River watersheds and Delta in general and, in particular, on the already endangered or
24 threatened winter-run and spring-run Chinook salmon, Central Valley steelhead, and Delta
25 Smelt. The proposed plan would significantly degrade environmental conditions in the Delta and
26 the Sacramento and San Joaquin River watersheds, harming fish and wildlife. These adverse
27 effects include reduced instream flows, reduced Delta outflow, increased salinity levels,
28

1 increased impingement and entrainment of fish in Delta pumps, habitat loss, reduced survival,
2 and increased mortality.

3 7. Pursuant to Section 7 of the Endangered Species Act, Reclamation consulted with
4 the National Marine Fisheries Service (“Fisheries Service”) and the U.S. Fish and Wildlife
5 Service (“Fish and Wildlife Service”) about the effects of Reclamation’s proposed plan on listed
6 species.

7 8. After analyzing the effects of the proposed plan, on July 1, 2019 biologists at the
8 Fisheries Service prepared a 1,123-page biological opinion that concluded that Reclamation’s
9 proposed plan was likely to jeopardize listed salmon and steelhead, as well as Southern Resident
10 killer whales, and was likely to destroy or adversely modify critical habitat, in violation of the
11 Endangered Species Act. That biological opinion included a reasonable and prudent alternative
12 requiring additional protective measures and alterations in Reclamation’s proposed plan in order
13 to avoid such adverse impacts to listed species. But instead of adopting that biological opinion,
14 which had been signed by multiple staffers and cleared by Fisheries Service attorneys, political
15 appointees at the Fisheries Service and the Interior Department short-circuited required
16 procedures, removed most of the scientists working on the biological opinion, and reversed the
17 findings of staff biologists.

18 9. In a move contrary to sound science and apparently based on political expedience,
19 the Fisheries Service subsequently issued, on October 21, 2019, a biological opinion (“Fisheries
20 Service Biological Opinion”) concluding, in contrast to its July 1, 2019 biological opinion, that
21 Reclamation’s proposed plan was *not* likely to jeopardize the continued existence of winter-run
22 and spring-run Chinook salmon, Central Valley steelhead, or Southern Resident killer whales, or
23 destroy or adversely modify their critical habitats.

24 10. Also on October 21, 2019 and contrary to sound science, the Fish and Wildlife
25 Service issued a biological opinion (“Fish and Wildlife Service Biological Opinion”) concluding
26 that Reclamation’s proposed plan was not likely to jeopardize the continued existence of Delta
27 Smelt or destroy or adversely modify the Delta Smelt’s critical habitat.

11. The October 2019 “no jeopardy”¹ conclusions contradict the information in the records on which they are supposedly based, rely on unlawful and unsupported assumptions, and do not comply with the requirements of the Endangered Species Act to protect and restore listed species. They are arbitrary, capricious, and not in accordance with law in violation of the Administrative Procedure Act, 5 U.S.C. §706.

12. Defendants Secretary of Commerce Wilbur Ross and National Oceanic and Atmospheric Administration Assistant Administrator for Fisheries Chris Oliver acted arbitrarily and capriciously when they concluded in the Fisheries Service Biological Opinion that Reclamation’s proposed plan would not jeopardize the continued existence of winter-run and spring-run Chinook salmon and Central Valley steelhead, or destroy or adversely modify their critical habitats, particularly given evidence that the proposed operations would dramatically alter the hydrology of the Delta and the Sacramento and San Joaquin Rivers and their tributaries, and would aggravate several of the very threats that led to the listing of these species under the Endangered Species Act in the first place.

13. Similarly, Defendants Secretary of the Interior David Bernhardt and Fish and Wildlife Service Acting Director Margaret Everson acted arbitrarily and capriciously when they concluded in the Fish and Wildlife Service Biological Opinion that Reclamation’s proposed plan would not jeopardize the continued existence of Delta Smelt or destroy or adversely modify its critical habitat, particularly given evidence that the proposed operations would dramatically alter the hydrology of the Delta and the Sacramento and San Joaquin Rivers and their tributaries, and would aggravate some of the very threats that led to the listing of the Delta Smelt under the Endangered Species Act in the first place.

PARTIES

14. Plaintiffs PACIFIC COAST FEDERATION OF FISHERMEN’S ASSOCIATIONS and INSTITUTE FOR FISHERIES RESOURCES are two sister organizations

¹ “No jeopardy” is used as shorthand for the conclusion that the plan is not likely to jeopardize the continued existence of, or destroy or adversely modify the critical habitat of, the threatened and endangered species assessed in the biological opinions.

involved in commercial fishing and fisheries conservation and research. The Pacific Coast Federation of Fishermen's Associations ("PCFFA") is the largest trade organization of commercial fishing men and women on the West Coast. PCFFA is a California-incorporated federation of many different port associations, boat owners' associations and marketing associations in California, Oregon, and Washington. PCFFA's Southwest Regional and National Office is located in San Francisco, California. Collectively, PCFFA's members represent more than 750 commercial fishing families and their commercial fishing business operations, most of whom are small and mid-sized commercial fishing boat owners and operators. Most of PCFFA's members derive all or part of their income from the harvesting of salmonids.² The decline of California's once-abundant Chinook and coho salmon species particularly has impacted PCFFA members in California by limiting commercial harvest opportunities, both through lost production of impaired stocks and because of "weak stock management" restrictions imposed on the fishing fleet generally to protect impaired salmon populations that intermingle with otherwise healthy stocks. Habitat losses to date already have cost the West Coast salmon fishing industry (including both commercial and recreational components) tens of thousands of jobs in the last thirty years. In California, these losses are directly related to widespread inland habitat destruction resulting from the construction and operation of the Water Projects, which continue to have adverse effects on the salmonid species that are critical to PCFFA's members' livelihoods. Declining California Central Valley populations of winter-run Chinook salmon in particular have greatly restricted fishing opportunities for fall-run Chinook salmon, which is the

² The term "salmonids" (sometimes just "salmon") are a fish biologists' shorthand term that refers to several species of anadromous fish from the genus *Oncorhynchus*, including: Chinook or king salmon (*Oncorhynchus tshawtscha*); coho or silver salmon (*Oncorhynchus kisutch*); coastal searun cutthroat (*Oncorhynchus clarki clarki*); steelhead (*Oncorhynchus mykiss gairdneri*); chum salmon (*Oncorhynchus keta*); pink salmon (*Oncorhynchus gorbuscha*); and sockeye salmon (*Oncorhynchus nerka*). Only Chinook, however, remain a significant part of California's ocean commercial fisheries, because direct take of all coho salmon is now expressly prohibited for conservation reasons. Steelhead and searun cutthroat can comprise significant portions of California recreational fisheries. Chum salmon, pink salmon, and sockeye salmon are ocean commercially fished in other states in the Pacific Northwest or Alaska, but are virtually extinct in California. For purposes of this Complaint, the terms "salmon" and "salmonids" refer only to California-origin Chinook, coho salmon, and/or steelhead unless otherwise specified, and common names (e.g., Chinook, coho or steelhead) will be used as appropriate to refer to specific salmon species.

1 backbone of the State's ocean salmon fishery, harming the livelihoods of many PCFFA
2 members. The recovery of winter-run Chinook salmon and spring-run Chinook salmon is likely
3 to increase fishing opportunities for PCFFA's members, resulting in benefits to them. PCFFA
4 has been active for more than 35 years in efforts to rebuild salmon populations in Central Valley
5 streams and rivers as well as watersheds connected naturally and unnaturally to the Central
6 Valley rivers. The Water Project operations authorized by the Fisheries Service Biological
7 Opinion and the Fish and Wildlife Service Biological Opinion (collectively, the "Biological
8 Opinions") will have an adverse effect on salmon in the rivers, as well as on the health of the
9 Sacramento-San Joaquin Delta and San Francisco Bay estuary, which play a critical role in the
10 development of juvenile salmon prior to going to sea. PCFFA has actively sought to prevent the
11 ill effects of intensified Water Project operations, including by joining in prior litigation against
12 such intensified operations and by presenting written comments and/or testimony to Reclamation
13 on numerous Central Valley Project contract renewals and many other relevant Central Valley
14 water issues.

15 15. The Institute for Fisheries Resources is a sister organization of PCFFA. Institute
16 for Fisheries Resources is a California-incorporated nonprofit organization with headquarters in
17 San Francisco, California. Established in 1993 by PCFFA, Institute for Fisheries Resources is
18 responsible for meeting the fishery research and conservation needs of working men and women
19 in the fishing industry by executing PCFFA's expanding fish habitat protection program. From
20 its inception, Institute for Fisheries Resources has helped fishing men and women in California
21 and the Pacific Northwest address salmon protection and restoration issues, with particular focus
22 on dam, water diversion, water pollution and forestry concerns. Institute for Fisheries Resources
23 is an active leader in several restoration programs affecting California's winter-run and spring-
24 run Chinook salmon, including removal of antiquated storage and hydroelectric dams.

25 16. PCFFA and Institute for Fisheries Resources both operate ongoing programs
26 aimed at addressing salmonid recovery for three of the major Chinook and steelhead populations
27 most affected by the proposed Water Project operations: Sacramento River winter-run Chinook,
28 Central Valley spring-run Chinook, and Central Valley steelhead. PCFFA and Institute for

1 Fisheries Resources have both been actively working to restore salmon habitat throughout the
2 west coast for nearly two decades, with a particular focus on salmon habitat in California inland
3 river systems directly affected by the Water Projects. PCFFA and Institute for Fisheries
4 Resources have actively advocated for the protection and restoration of flows critical to the
5 health of the Bay and Delta, flows that would be imperiled as a result of the Water Project
6 operations proposed by Reclamation and authorized by the Biological Opinions.

7 17. Plaintiff GOLDEN STATE SALMON ASSOCIATION (“Golden State Salmon”)
8 is a non-profit organization that works to protect and restore California’s largest salmon
9 producing habitat in the Central Valley for the communities that rely on salmon as a long-term,
10 sustainable commercial, recreational, and cultural resource. Golden State Salmon’s members
11 include commercial and recreational salmon fishermen, businesses, restaurants, a Native
12 American tribe, environmentalists, elected officials, and community members that rely on
13 salmon. Golden State Salmon’s headquarters are in San Francisco, California. Golden State
14 Salmon and its more than 3,500 members have a direct interest in the survival and perpetuation
15 of salmon and other aquatic resources that depend upon Central Valley Rivers, the Delta, the
16 Bay, and its estuary. Most of Golden State Salmon’s members live in the Bay’s watershed, and
17 many rely on this region for their livelihood in the commercial fishing, sportfishing, and boating
18 industries. In addition, many Golden State Salmon members regularly visit and use the Bay, its
19 estuary, and the Central Valley rivers that flow into the Bay and its estuary for recreational
20 experiences and aesthetic enjoyment. Golden State Salmon regularly participates in
21 administrative proceedings on behalf of its members to protect, enhance, and restore declining
22 populations of Central Valley salmon that depend on Central Valley rivers and the Delta.
23 Golden State Salmon has worked collaboratively with government agencies, independent
24 academic experts, water users, and land owners on large-scale ecological restoration programs
25 through the Central Valley Project Improvement Act and other initiatives. Golden State Salmon
26 has submitted protests and petitions for reconsideration of revisions to the water quality
27 standards in the Bay-Delta Plan. Since its founding in 2011, Golden State Salmon has also
28 submitted written comments to, and testified at, public workshops regarding the need to

1 implement water quality standards for the Bay and Delta, and to update and improve those
2 standards.

3 18. Plaintiff BAY.ORG d/b/a THE BAY INSTITUTE (“The Bay Institute”) is a non-
4 profit conservation organization, located in San Francisco, dedicated to protecting, restoring, and
5 inspiring conservation of the ecosystems of the Bay and its watershed. The majority of the Bay
6 Institute’s supporters live around the Bay and its watershed, regularly visit and use the Bay, the
7 Delta, and Central Valley rivers for recreational experience, aesthetic enjoyment, and/or
8 livelihood in the commercial fishing, sportfishing, and boating industries, and have a direct
9 interest in the survival and perpetuation of fish species and other aquatic resources. The Bay
10 Institute regularly participates in administrative and judicial proceedings on behalf of its
11 supporters to protect, enhance, and restore declining populations of native California fishes,
12 including successful efforts to adopt and implement the historic settlement to restore Chinook
13 salmon to the San Joaquin River below Friant Dam; to list Delta Smelt under the federal
14 Endangered Species Act and spring-run Chinook salmon under the California Endangered
15 Species Act; and to invalidate and replace insufficiently protective biological opinions for
16 Chinook salmon, steelhead, and Delta Smelt under the Endangered Species Act. The Bay
17 Institute has also submitted extensive expert testimony and technical exhibits regarding the needs
18 of Chinook salmon, Delta Smelt, and other species to the State Water Resources Control Board
19 for its update of the Bay-Delta Water Quality Control Plan and other regulatory proceedings.
20 The Bay Institute has also worked collaboratively with government agencies, independent
21 academic experts, water users, and landowners to design and implement large-scale ecological
22 restoration programs through the CALFED Bay-Delta Program, the Central Valley Project
23 Improvement Act, the Delta Vision Task Force, the Bay-Delta Conservation Plan, the Central
24 Valley Salmon Habitat Partnership, and other processes.

25 19. Plaintiff NATURAL RESOURCES DEFENSE COUNCIL, INC. (“NRDC”) is a
26 non-profit environmental organization with more than 375,000 members nationwide, including
27 more than 66,000 members in California. NRDC has thousands of members in the counties that
28 surround the Delta, including more than 1,700 members in Contra Costa County, more than

1 2,400 members in San Francisco, more than 3,300 members in Alameda County, and close to
2 2,000 members in Marin and Napa Counties. NRDC maintains an office in San Francisco,
3 California. NRDC's purpose is to safeguard the Earth: its people, its plants, and animals and the
4 natural systems on which all life depends. The organization works to restore the integrity of the
5 elements that sustain life—air, land, and water—and to defend endangered natural places. For
6 decades, NRDC has advocated extensively for the protection of the nation's waterways and
7 wildlife, including the winter-run and spring-run Chinook salmon and Delta Smelt. NRDC has
8 brought and intervened in lawsuits designed to ensure that Water Project operations do not
9 jeopardize the continued existence of threatened and endangered fish species or adversely
10 modify those species' critical habitat. NRDC has also long worked in non-litigation settings to
11 protect the Sacramento and San Joaquin Rivers, the Bay-Delta estuary, and the native fish for
12 which those waterways provide habitat. NRDC submitted substantial written comments to the
13 Fisheries Service and the Fish and Wildlife Service regarding the major flaws in the Bureau of
14 Reclamation's proposed action, the draft biological opinions, and the reinitiation of consultation
15 process.

16 20. Plaintiff DEFENDERS OF WILDLIFE ("Defenders") is a non-profit corporation
17 with hundreds of thousands of members across the nation, including tens of thousands of
18 members in California. Defenders is dedicated to the protection of all native animals and plants
19 in their natural communities. Through education, advocacy, litigation, and other efforts,
20 Defenders works to preserve species and the habitats upon which they depend. Defenders has
21 been closely involved in policy and litigation matters associated with water quality and species
22 habitat in the Sacramento River, San Joaquin River, and Delta region for many years, including
23 litigation and regulatory actions intended to benefit winter-run and spring-run Chinook salmon,
24 Delta Smelt, and their habitats. Defenders has submitted written comments in support of more
25 protective water quality standards for the Delta and its tributary rivers, filed litigation to oppose
26 infrastructure projects that would impact these imperiled fish and their habitats, and worked to
27 secure funding for habitat restoration projects in the Sacramento River, San Joaquin River, and
28 Delta. In addition to Delta Smelt and salmonids, Defenders strives to protect a broad range of

1 species that depend upon the health of the Sacramento and San Joaquin River watersheds and the
2 Delta, including giant garter snakes, migratory waterfowl and shorebirds, and Southern Resident
3 orcas.

4 21. Plaintiffs and members of Plaintiffs have been and will continue to be actively
5 involved in efforts to protect and restore the Sacramento and San Joaquin River watersheds and
6 the Delta, and the species that rely upon those areas for habitat. Among other actions, Plaintiffs
7 and members of Plaintiffs have written to numerous federal, state, and local agencies and
8 officials to urge increased protection for the species that rely upon the Delta and the rivers that
9 flow into it for habitat.

10 22. Plaintiffs and many of their members live and/or work in communities near the
11 water resources affected by the Water Projects, including in the Delta and the Sacramento and
12 San Joaquin River watersheds. In addition to advocating for protections for these ecosystems
13 and the endangered and threatened species that inhabit them, members of the Plaintiff
14 organizations are active participants in the life of the Delta and the Sacramento River and San
15 Joaquin River watersheds. Individual members of Plaintiff organizations frequently visit the
16 Delta and the Sacramento River and San Joaquin River watersheds, which provide critical habitat
17 for winter-run and spring-run Chinook salmon, Central Valley steelhead, and Delta Smelt, to use
18 and appreciate the Delta and river ecosystems.

19 23. Individual members of Plaintiff organizations regularly derive recreational,
20 aesthetic, spiritual, cultural, scientific, educational, and conservation benefits and enjoyment
21 from the existence of winter-run and spring-run Chinook salmon, Central Valley steelhead, and
22 Delta Smelt, whose populations are harmed by the operations of the Water Projects. They use,
23 on a continuing and ongoing basis, the water resources in the Delta and the Sacramento and San
24 Joaquin River watersheds for many educational, recreational, aesthetic, spiritual, cultural, and
25 commercial purposes such as hiking, boating, bird watching, photography, swimming, fishing,
26 and scientific study.

27 24. Winter-run and spring-run Chinook salmon, Central Valley steelhead, and Delta
28 Smelt migrate through the Delta and parts of the Sacramento and San Joaquin River watersheds

1 during different periods of their lives and depend upon the health of those ecosystems. The use
2 of the Delta and the Sacramento and San Joaquin River watersheds by members of the Plaintiff
3 organizations is and will continue to be detrimentally affected by the decline of these species and
4 the corresponding decline in the health of the Delta and the Sacramento and San Joaquin River
5 watersheds. Members of the Plaintiff organizations will continue to regularly derive benefit and
6 enjoyment from the existence of winter-run and spring-run Chinook salmon, Central Valley
7 steelhead, and Delta Smelt by regularly engaging in scientific, education, and conservation
8 activities involving these species. These benefits and enjoyments would increase if winter-run
9 and spring-run Chinook salmon, Central Valley steelhead, and Delta Smelt were to recover from
10 their precarious status of being threatened with extinction.

11 25. The populations of winter-run and spring-run Chinook salmon, Central Valley
12 steelhead, and Delta Smelt will continue to decline, and the species may soon become extinct,
13 unless the utmost care is taken to protect these species and their remaining habitat. The health of
14 these species is one indicator of the overall health of the Delta and the Sacramento and San
15 Joaquin River watersheds. Therefore, while the extirpation of any of the fish species from any
16 portion of the Delta or the Sacramento and San Joaquin River watersheds would constitute an
17 incalculable environmental loss in and of itself, it would also indicate more generally that the
18 health and diversity of the species' habitat has been severely degraded. These events, and the
19 threat of these events, would deprive Plaintiffs and members of Plaintiffs of the recreational,
20 spiritual, cultural, aesthetic, educational, conservation, commercial, and other benefits they
21 presently derive from the Delta and the Sacramento and San Joaquin River ecosystems.

22 26. The above-described aesthetic, conservation, recreational, scientific, educational,
23 commercial, wildlife and fisheries preservation, and other interests of Plaintiffs and members of
24 Plaintiff organizations have been, are being, and, unless the relief prayed for herein is granted,
25 will continue to be adversely affected and irreparably injured by the Defendants' arbitrary and
26 capricious adoption of the Biological Opinions and those Opinions' arbitrary and capricious
27 conclusions that the proposed plan and Water Project operations will not jeopardize the Delta
28 Smelt, Central Valley steelhead, and winter-run and spring-run Chinook salmon. These injuries

1 are actual and concrete and would be redressed by the relief sought herein. Plaintiffs have no
2 adequate remedy at law.

3 27. The Defendants in this action are:

- 4 a. WILBUR ROSS. Mr. Ross is sued in his official capacity as Secretary of the
5 Department of Commerce (the “Commerce Secretary”). He is responsible for
6 implementing the Endangered Species Act for species under the Department
7 of Commerce’s jurisdiction, including salmon and steelhead, and for ensuring
8 that formal consultations and biological opinions required under Section 7 of
9 the Endangered Species Act are completed in accordance with the letter and
10 intent of the law.
- 11 b. CHRIS OLIVER. Mr. Oliver is sued in his official capacity as Assistant
12 Administrator for Fisheries at the National Oceanic and Atmospheric
13 Administration. He has been delegated the responsibilities of the Secretary of
14 Commerce described in the preceding paragraph. 50 C.F.R. §402.01(b). He
15 is responsible for administering the Endangered Species Act for species under
16 the Department of Commerce’s jurisdiction, including reviewing and
17 approving the findings of the Fisheries Service Biological Opinion.
- 18 c. NATIONAL MARINE FISHERIES SERVICE. The Fisheries Service is an
19 agency of the United States government. The Fisheries Service is responsible
20 for performing consultations under Section 7 of the Endangered Species Act
21 for species under the Department of Commerce’s jurisdiction.
- 22 d. DAVID BERNHARDT. Mr. Bernhardt is sued in his official capacity as
23 Secretary of the Department of Interior (the “Interior Secretary”). He is
24 responsible for implementing the Endangered Species Act for species under
25 the Department of Interior’s jurisdiction, including Delta Smelt, and for
26 ensuring that formal consultations and biological opinions required under
27 Section 7 of the Endangered Species Act are completed in accordance with the
28 letter and intent of the law.

1 e. MARGARET EVERSON. Ms. Everson is sued in her official capacity as
2 Acting Director of the Fish and Wildlife Service. She has been delegated the
3 responsibilities of the Secretary of Interior described in the preceding
4 paragraph. 50 C.F.R. §402.01(b). She is responsible for administering the
5 Endangered Species Act for species under the Department of Interior's
6 jurisdiction, including reviewing and approving the findings of the Fish and
7 Wildlife Service Biological Opinion.

8 f. FISH AND WILDLIFE SERVICE. The Fish and Wildlife Service is an
9 agency of the United States government. The Fish and Wildlife Service is
10 responsible for performing consultations under section 7 of the Endangered
11 Species Act for species under the Department of Interior's jurisdiction.

12 **JURISDICTION AND VENUE**

13 28. This Court has jurisdiction over this action pursuant to 28 U.S.C. §1331 (action
14 arising under the laws of the United States); 16 U.S.C. §1540(c) (action arising under the
15 Endangered Species Act); and 5 U.S.C. §§702, 703, and 706 (judicial review of federal agency
16 actions).

17 29. The Commerce Secretary has issued the Fisheries Service Biological Opinion on
18 the effects of the proposed Water Project plan on winter-run and spring-run Chinook salmon,
19 Central Valley steelhead, Green Sturgeon, and Southern Resident killer whales pursuant to 16
20 U.S.C. §1536(b). The Interior Secretary has issued the Fish and Wildlife Service Biological
21 Opinion on the effects of the proposed Water Project plan on Delta Smelt, among other species,
22 pursuant to 16 U.S.C. §1536(b). Plaintiffs assert that these Biological Opinions are arbitrary and
23 capricious, an abuse of discretion, and not in accordance with law within the meaning of 5
24 U.S.C. §706(2). An actual controversy therefore exists between the parties within the meaning
25 of the Declaratory Judgment Act, 28 U.S.C. §2201(a).

26 30. Venue lies in this judicial district by virtue of 28 U.S.C. §1391(e)(1), because
27 several plaintiffs reside within this judicial district and a substantial part of the events or
28 omissions giving rise to the claims occurred within this judicial district. In particular, a

substantial part of the Delta Smelt's critical habitat lies in and adjacent to Contra Costa County. Similarly, a substantial part of the winter-run Chinook salmon's critical habitat lies in and adjacent to Contra Costa, Alameda, San Francisco, Marin, and Sonoma Counties. In addition, the Water Projects' two major Delta pumping plants are located in this judicial district: the Central Valley Project's Tracy (C.W. Bill Jones) Pumping Plant and the State Water Project's Harvey O. Banks Delta Pumping Plant are located in Contra Costa County and Alameda County. The operation of these pumping plants, which are used to pump and export water out of the Delta, create many of the harmful conditions giving rise to this action. These pumps entrain and kill fish, including Delta Smelt, juvenile Central Valley steelhead, and juvenile spring-run and winter-run Chinook. The pumps also reduce the total amount of water flowing out of the Delta, thus altering the basic water quality conditions and biological productivity of the Delta habitat, in which Delta Smelt live and through which Central Valley steelhead and spring-run and winter-run Chinook must pass as they migrate into and back from the Pacific Ocean at different stages of their lives. Finally, many of the Plaintiffs maintain offices and/or have many members who reside within this judicial district, as set forth above. Plaintiffs Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, The Bay Institute, and Golden State Salmon maintain their national offices and reside within this judicial district.

INTRADISTRICT ASSIGNMENT

31. This action should be assigned to the San Francisco or Oakland Division pursuant to Civil L.R. 3-2(d) because a substantial portion of the events giving rise to the claims occurred, or will occur, in Contra Costa County and Alameda County, and in the waters in and adjacent to Contra Costa, Alameda, San Francisco, Marin, and Sonoma Counties.

STATUTORY AND REGULATORY FRAMEWORK

32. Congress enacted the Endangered Species Act in 1973 "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species" 16 U.S.C. §1531(b).

33. The Supreme Court has observed that “[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost,” and that, under the act, “[it] intended endangered species to be afforded the highest of priorities.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 174, 184 (1978).

A. Consultation under the Endangered Species Act

34. Section 7(a)(2) of the Endangered Species Act imposes a substantive duty on each federal agency to ensure that any activity which it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify any listed species’ critical habitat. 16 U.S.C. §1536(a)(2); 50 C.F.R. §402.14.

35. An action “jeopardize[s] the continued existence” of a listed species if it reasonably would be expected to reduce appreciably the likelihood of both the survival and recovery of the species in the wild. 50 C.F.R. §402.02.

36. An action “destr[oys] or adverse[ly] modifi[es]” critical habitat if it directly or indirectly alters critical habitat such that the value of the critical habitat for either the survival or the recovery of a species is appreciably diminished. 50 C.F.R. §402.02.³

37. To ensure agency compliance with the substantive duty not to jeopardize threatened or endangered species or to destroy or adversely modify their critical habitat, Section 7(a)(2) of the Endangered Species Act also imposes on federal agencies a procedural duty to consult with either the Secretary of the Interior, in the case of terrestrial and freshwater species including Delta Smelt, and/or the Secretary of Commerce with respect to anadromous species such as winter-run and spring-run Chinook salmon and Central Valley steelhead. 16 U.S.C. §1536(a)(2).

³ Several Endangered Species Act implementing regulations, including several of the definitions found in 50 C.F.R. §402.02, were amended effective October 28, 2019. Because the biological opinions at issue in this case were published and adopted prior to that date, on or about October 21, 2019, the relevant version of the regulations is the version that was in effect prior to October 28, 2019. The Biological Opinions confirm this, stating that because the consultation was pending and completed prior to October 28, 2019, they apply the previous version of the regulations to the consultation.

38. Following consultation, the relevant Secretary must issue a “biological opinion” that determines whether the activity is likely to jeopardize or destroy or adversely modify the critical habitat of a listed species under that Secretary’s jurisdiction, and provides a summary of the reasons for the biological opinion’s conclusion. 16 U.S.C. §1536(b)(3)(A).

39. If the biological opinion concludes that the proposed action will jeopardize the species or destroy or adversely modify its critical habitat, the Secretary must recommend “reasonable and prudent alternatives” that can be taken by the agency to implement the action that would neither jeopardize the continued existence of the species nor destroy or adversely modify its critical habitat. 16 U.S.C. §1536(b)(3)(A).

40. If the consulting agency concludes that a proposed agency action will not jeopardize the continued existence of a species but is likely to result in incidental takings, it issues an “incidental take statement” with the biological opinion. 16 U.S.C. §1536(b)(4); 50 C.F.R. §402.14(i). The statement acts as a safe harbor, exempting the specified amount of incidental taking from the take prohibition of Endangered Species Act Section 9.

B. Requirements Applicable to Biological Opinions

41. In formulating a biological opinion, the consulting agency must use the best scientific and commercial data available. 16 U.S.C. §1536(a)(2); 50 C.F.R. §402.14(g)(8).

42. A biological opinion must include a discussion of “whether the action, taken together with [its] cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.” 50 C.F.R. §402.14(g)(3), (4). The Fisheries Service and the Fish and Wildlife Service have defined the “effects of the action” as “the direct and indirect effects . . . on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline.” 50 C.F.R. §402.02. Indirect effects are further defined as “those that are caused by the proposed action and are later in time, but still are reasonably certain to occur.” *Id.* “Interrelated actions” are actions that are “part of a larger action and depend on the larger action for their justification.” *Id.* “Interdependent actions” are actions that “have no independent utility apart from the action under consideration.” *Id.*

43. A biological opinion may consider mitigation measures that are included with the proposed action to assess whether the action will jeopardize the continued existence and recovery of the species or adversely affect its critical habitat. However, any such “[m]itigation measures supporting a biological opinion’s no jeopardy conclusion must be ‘reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards.’” *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 839 F. Supp. 2d 1117, 1125–26 (D. Or. 2011) (quoting *Ctr. for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1152 (D. Ariz. 2002)); see *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1117 (9th Cir. 2012); *Nat. Res. Def. Council v. Kempthorne*, 506 F. Supp. 2d 322, 350–57 (E.D. Cal. 2007).

44. Reliance on uncertain future mitigation measures to conclude that the project will not jeopardize the species or adversely modify its critical habitat violates Section 7(a)(2) of the Endangered Species Act. Such reliance allows potential jeopardy to listed species, and destruction or adverse modification of their habitats, without first ensuring that adequate measures will be implemented, based on the best available science, to ensure that the action will neither jeopardize the continued existence and recovery of the species nor adversely modify its critical habitat.

45. In addition, the Endangered Species Act requires a biological opinion to analyze the effects of the entire action authorized by the agency. Specifically, Section 7(a)(2) of the Endangered Species Act, 16 U.S.C. §1536(a)(2), requires that a consulting agency consider the “entire agency action” in a consultation that is “coextensive” with the extent and duration of the action. *Conner v. Burford*, 848 F.2d 1441, 1453, 1458 (9th Cir. 1988); see, e.g., *Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 521–25, 532 (9th Cir. 2010) (holding that a biological opinion was arbitrary and capricious where the Fish and Wildlife Service “committed legal error by limiting the scope of the action to five years”). The term “agency action” must be defined broadly because “caution can only be exercised if the agency takes a look at all the possible

1 ramifications of the agency action.” *Conner*, 848 F.2d at 1453 (brackets omitted) (quoting *N.*
2 *Slope Borough v. Andrus*, 642 F.2d 589, 608 (D.C. Cir. 1980)).

3 46. Failing to analyze the long-term effects of a project that will operate for decades
4 violates the Endangered Species Act’s mandate that the whole of the action, and its effects, be
5 analyzed.

6 47. Any incidental take statement that is included in a biological opinion must
7 “specif[y] the impact”—that is, the anticipated amount or extent—“of such incidental taking on
8 the species,” 50 C.F.R. §402.14(i)(1)(i), as well as “those reasonable and prudent measures . . .
9 necessary or appropriate to minimize such impact,” 16 U.S.C. §1536(b)(4). The level of take
10 authorized in the incidental take statement must be tied to the scope of the proposed action and
11 its effects that are analyzed in the underlying biological opinion; a take statement is invalid if it
12 is broader and allows for more take than is anticipated and supported by a valid biological
13 opinion. *See Oregon Nat. Res. Council v. Allen*, 476 F.3d 1031, 1036–37 (9th Cir. 2007).

14 48. “If during the course of the action the amount or extent of incidental taking, as
15 specified [in the statement], is exceeded, the Federal agency must reinitiate consultation
16 immediately.” 50 C.F.R. §402.14(i)(4). To effectuate this reinitiation requirement, an incidental
17 take statement must “establish a *meaningful* trigger for renewed consultation,” which requires
18 that the action agency be “capable of quantifying take to determine when the trigger has been
19 met.” *Wild Fish Conservancy*, 628 F.3d at 532 (emphasis added); *see also Oregon Nat. Res.*
20 *Council*, 476 F.3d at 1041 (“[A] limitation on take . . . cannot be so indeterminate as to prevent
21 the Take Statement from contributing to the monitoring of incidental take by eliminating its
22 trigger function.”).

23 49. The consulting agency “is responsible for specifying in the [incidental take]
24 statement how the action agency is to monitor and report the effects of the action on listed
25 species.” *Wild Fish Conservancy*, 628 F.3d at 532.

26 50. “A surrogate (*e.g.*, similarly affected species or habitat or ecological conditions)
27 may be used to express the amount or extent of anticipated take.” 50 C.F.R. §402.14(i)(1)(i).
28 However, such use of a surrogate requires that the biological opinion or incidental take statement

1 “[d]escribe[] the causal link between the surrogate and take of the listed species” and “explain[]
 2 why it is not practical to express the amount or extent of anticipated take or to monitor take-
 3 related impacts in terms of individuals of the listed species.” *Id.*; see also *Oregon Nat. Res.*
 4 *Council*, 476 F.3d at 1037 (“Congress has clearly declared a preference for expressing take in
 5 numerical form, and an Incidental Take Statement that utilizes a surrogate instead of a numerical
 6 cap on take must explain why it was impracticable to express a numerical measure of take.”). In
 7 other words, “the agency must articulate a rational connection between the surrogate and the
 8 taking of the species.” *Wild Fish Conservancy*, 628 F.3d at 531.

9 51. In addition, use of a surrogate requires that the incidental take statement “set[] a
 10 clear standard for determining when the level of anticipated take has been exceeded.” 50 C.F.R.
 11 §402.14(i)(1)(i). The Ninth Circuit “has rejected a surrogate trigger so vague that it failed to
 12 ‘provide a clear standard for determining when the authorized level of take has been
 13 exceeded,’ and a surrogate so broad—‘all spotted owls’ associated with the project—that it
 14 ‘could not adequately trigger reinitiation of consultation.’” *Wild Fish Conservancy*, 628 F.3d at
 15 531 (first quoting *Ariz. Cattle Growers’ Ass’n v. U.S. Fish & Wildlife Service*, 273 F.3d 1229,
 16 1250–51 (9th Cir. 2001), then quoting *Or. Natural Res. Council*, 476 F.3d at 1038).

17 52. Ultimately, if the consulting agency’s biological opinion fails to meet these or
 18 other Endangered Species Act requirements, or if the agency fails to make a rational decision on
 19 the record before it, the biological opinion is invalid as “arbitrary, capricious, an abuse of
 20 discretion, or otherwise not in accordance with law.” 5 U.S.C. §706(2)(A). Thus, the consulting
 21 agency must always “articulate[] a rational connection between the facts found and the
 22 conclusions made” in a biological opinion. *Wild Fish Conservancy*, 628 F.3d at 525 (brackets in
 23 original). “[I]f the agency has relied on factors which Congress has not intended it to consider,
 24 entirely failed to consider an important aspect of the problem, offered an explanation for its
 25 decision that runs counter to the evidence before the agency, or is so implausible that it could not
 26 be ascribed to a difference in view or the product of agency expertise,’ the agency action may be
 27 overturned as unlawful.” *Pac. Coast Fed’n of Fishermen’s Ass’ns v. Bureau of*
 28

Reclamation, 426 F.3d 1082, 1090 (9th Cir. 2005) (quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

FACTUAL BACKGROUND

Relevant Listed Species

A. Sacramento River Winter-Run Chinook Salmon

53. Winter-run Chinook salmon are born in the Sacramento River, below Keswick Dam.⁴ According to the Fisheries Service, winter-run Chinook salmon population estimates were as high as nearly 120,000 fish in the 1960s, but declined to less than 200 fish during the 1987-1992 drought. The Fisheries Service found that between 2007 and 2017, the population “has shown a precipitous decline.” In 2014 and 2015, the population experienced extremely high mortality due to lethal water temperatures below Keswick Dam.⁵ This is the only wild, naturally-spawning population of winter-run Chinook salmon in California.

54. Winter-run Chinook salmon exhibit a unique life history pattern found nowhere else in the world. Adults return to spawn in the winter and spring and lay their eggs during the spring and summer months. The eggs develop and hatch into fry over the summer and fall months. The juvenile winter-run Chinook salmon typically begin to migrate down the Sacramento River during the fall. After rearing in the Sacramento River and the Delta, they

⁴ Winter-run Chinook inhabit the upper Sacramento River and its tributaries, where the flow of cold water throughout the summer allows for spawning, egg incubation, and rearing. Historically, winter-run Chinook relied on the McCloud, Pit, and Little Sacramento Rivers, as well as Hat and Battle Creeks, for habitat conducive to egg and fry development and survival and juvenile rearing. The construction of Shasta Dam blocked access to almost all of these rearing waters. Today, the upper Sacramento River below Keswick Dam is the only remaining spawning area used by winter-run Chinook. The survival of the winter-run Chinook is therefore completely dependent on the temperature and flow conditions below Keswick Dam.

⁵ Specifically, during 2014 and 2015, operation of Shasta Dam resulted in high temperatures that caused two consecutive years of high mortality, with temperature-dependent mortality of 77 percent in 2014 and 85 percent in 2015, resulting in egg-to-fry survival rates of only 5.6 percent and 4.2 percent in 2014 and 2015, respectively. As a result of this high juvenile mortality, returns of adult winter-run Chinook salmon were low in 2016 to 2018, with only 977 adults returning in 2017. Moreover, on average 66 percent of spawning winter-run Chinook were hatchery-origin from 2016 to 2018, which surpasses the fifty percent high risk threshold for negative hatchery influence.

1 typically out-migrate to the ocean in the winter and spring, where they typically spend two or
2 more years before returning as adults to migrate through the Bay and Delta, and up the
3 Sacramento River to spawn. Winter-run Chinook salmon adults die after spawning.

4 55. The Fisheries Service listed the winter-run Chinook salmon as a threatened
5 species under the Endangered Species Act on August 4, 1989, 58 Fed. Reg. 32065, and elevated
6 its status to endangered on January 4, 1994. 59 Fed. Reg. 440. The Fisheries Service designated
7 critical habitat for winter-run Chinook salmon on June 16, 1993. 58 Fed. Reg. 33212. The
8 winter-run Chinook's critical habitat includes waters of the Sacramento River, the Delta, and the
9 Bay. *Id.* at 33212–13.

10 56. According to the Fisheries Service, winter-run Chinook salmon are one of the
11 most endangered fish species in the United States. The Fisheries Service's Biological Opinion
12 concludes that the risk of extinction has increased from moderate risk of extinction in 2005 to
13 high risk of extinction today, and that the species has recently experienced "continued low
14 abundance, a negative growth rate over two complete generations, significant rate of decline
15 since 2006, increased hatchery influence on the population, and increased risk of catastrophe."
16 Recent data indicates extremely low abundance levels, and the species is approaching extinction.

17 57. Water Project operations, including water storage and exports, impact winter-run
18 Chinook salmon—as well as spring-run Chinook salmon—by, among other things, creating high
19 water temperatures, dewatering redds (nests where salmon lay their eggs), and altering the
20 physical and biological features of the Delta and the rivers that flow into it, thus reducing the
21 survival of juvenile salmon as they migrate downstream to the Pacific Ocean.

22 *B. Central Valley Spring-Run Chinook Salmon*

23 58. Spring-run Chinook salmon currently exist in the Sacramento River, the Feather
24 River, and several tributaries including Mill, Deer, and Butte Creeks. In addition, salmon
25 exhibiting spring-run Chinook salmon life history have been observed in the Tuolumne and
26 Stanislaus rivers in recent years. Between the 1880s and 1940s, the Central Valley supported as
27 many as 600,000 spring-run Chinook salmon returning as adults to spawn per year.
28

59. According to the Fisheries Service, spring-run Chinook salmon adults typically leave the ocean to begin their migration through the Delta in late January and February, spawning typically occurs in September or October, and fry emerge from November to May.⁶ The downstream migration of juvenile spring-run Chinook salmon is highly variable, with some juveniles staying upstream to rear for as long as a year. Peak migration through the Delta occurs from November to May. Spring-run Chinook salmon typically spend several years in the ocean before returning as adults to complete their life cycle. Like most other salmon species, they die shortly after spawning.

60. The Fisheries Service listed the spring-run Chinook salmon as a threatened species under the Endangered Species Act on September 6, 1999. 64 Fed. Reg. 50394. It designated critical habitat for the spring-run Chinook salmon on September 2, 2005. 58 Fed. Reg. 52488. The spring-run Chinook salmon's critical habitat includes waters of the Sacramento River, lower Feather River, and Yuba Rivers, as well as Beegum, Battle, Clear, Cottonwood, Antelope, Mill, Deer, Butte, and Big Chico Creeks, and portions of the northern Delta.

61. In 2016 the California Department of Fish and Wildlife estimated that only 8,112 spring-run Chinook salmon returned to spawn in the Sacramento River, its tributaries, and the Feather River hatchery. Declines in abundance from 2005 to 2016 in Mill Creek and Deer Creek placed those populations at increased risk of extinction, with adult populations in Mill Creek and Deer Creek below 500 fish for four consecutive years (2015-2018). The Fisheries Service Biological Opinion expresses concern that the species may deteriorate to high extinction risk based on the population size or rate of decline of the species.

C. Central Valley Steelhead

62. Steelhead are an anadromous species that migrate from freshwater to the ocean as juveniles and return to freshwater to spawn.

⁶ Spring-run Chinook have similar temperature requirements for incubating eggs as winter-run Chinook. The Fisheries Service has found that in 2014 and 2015 high water temperatures in the Sacramento River resulted in increased, if not complete, temperature-dependent mortality of spring-run Chinook salmon eggs in the mainstem of the Sacramento River.

63. According to the Fisheries Service, steelhead typically spend two years in freshwater before migrating to the ocean. They spend an additional two or three years in the ocean prior to their return to freshwater streams for spawning. Unlike other Pacific salmonids, steelhead can spawn more than once before they die, though they rarely spawn more than twice.

64. Historically, Central Valley steelhead were abundant throughout the Sacramento and San Joaquin Rivers, with as many as one to two million adults annually. By the early 1960s, the population had declined to an estimated 40,000 adults, and have declined significantly since that time.

65. Central Valley steelhead were listed as threatened on March 19, 1998 (53 Fed. Reg. 13347). Critical habitat was designated for Central Valley steelhead on September 2, 2005. 70 Fed. Reg. 52488, 52518.

66. The Fisheries Service Biological Opinion found that wild steelhead have declined in abundance over the past 25 years, that since 2011 natural production has been extremely low and has likely declined further, and that the long-term trend remains negative. Small populations of steelhead are found in the rivers and streams of the Sacramento River, San Joaquin River, and eastside tributaries including the Stanislaus, Mokelumne, and Calaveras rivers. The Fisheries Service has concluded that the species is likely to become endangered in the foreseeable future.

D. Delta Smelt

67. The Delta Smelt is an estuarine fish that averages 2.5 inches in length and that spends its entire life span in the Delta. The Delta is home to the only Delta Smelt population on Earth. Delta Smelt typically live only one year and spend most of their life span in the Delta's low-salinity zone where saline and fresh waters mix, but they migrate upstream into freshwater to spawn.

68. Historically, Delta Smelt was one of the most common and abundant pelagic fishes in the estuary. Since the early 1980s, however, its abundance has declined by more than ninety-nine percent.

69. The amount and the quality of Delta Smelt habitat has declined dramatically due to the Water Projects' water storage, diversion, and export operations. As fresh water is stored,

1 diverted, or exported, the low-salinity zone shifts upstream from large, shallow habitats, found in
2 Suisun Bay, to narrow, deep river channels of the Delta. Those channels provide less suitable
3 habitat than open water environments for Delta Smelt rearing. This impact to the habitat of the
4 Delta Smelt is compounded by the high levels of mortality that can be caused by the Water
5 Projects' export pumps, which entrain and kill fish. Limiting the number of Delta Smelt that are
6 entrained and killed in the pumping plants and maintaining a minimum level of Delta outflow
7 (the amount of water flowing through the Delta and into the San Francisco Bay) during certain
8 times of the year are critical to protecting estuarine habitat in the Delta and to the abundance of
9 Delta Smelt.

10 70. The Fish and Wildlife Service listed the Delta Smelt as a threatened species under
11 the Endangered Species Act on March 5, 1993. 58 Fed. Reg. 12854 (March 5, 1993). The Fish
12 and Wildlife Service designated critical habitat for the Delta Smelt on December 19, 1994. 59
13 Fed. Reg. 65256 (Dec. 19, 1994). The Delta Smelt's critical habitat includes all waters and
14 submerged lands within the Delta, including those at the pumping plants for the Water Projects.
15 *Id.* at 65260. In 2010, the Fish and Wildlife Service determined that the Delta Smelt's status
16 warranted reclassifying its listing as endangered, but found that the agency was precluded from
17 doing so by competing actions. 73 Fed. Reg. 39639 (July 10, 2008) (ninety-day endangerment
18 finding); 75 Fed. Reg. 17667 (April 7, 2010) (warranted but precluded).

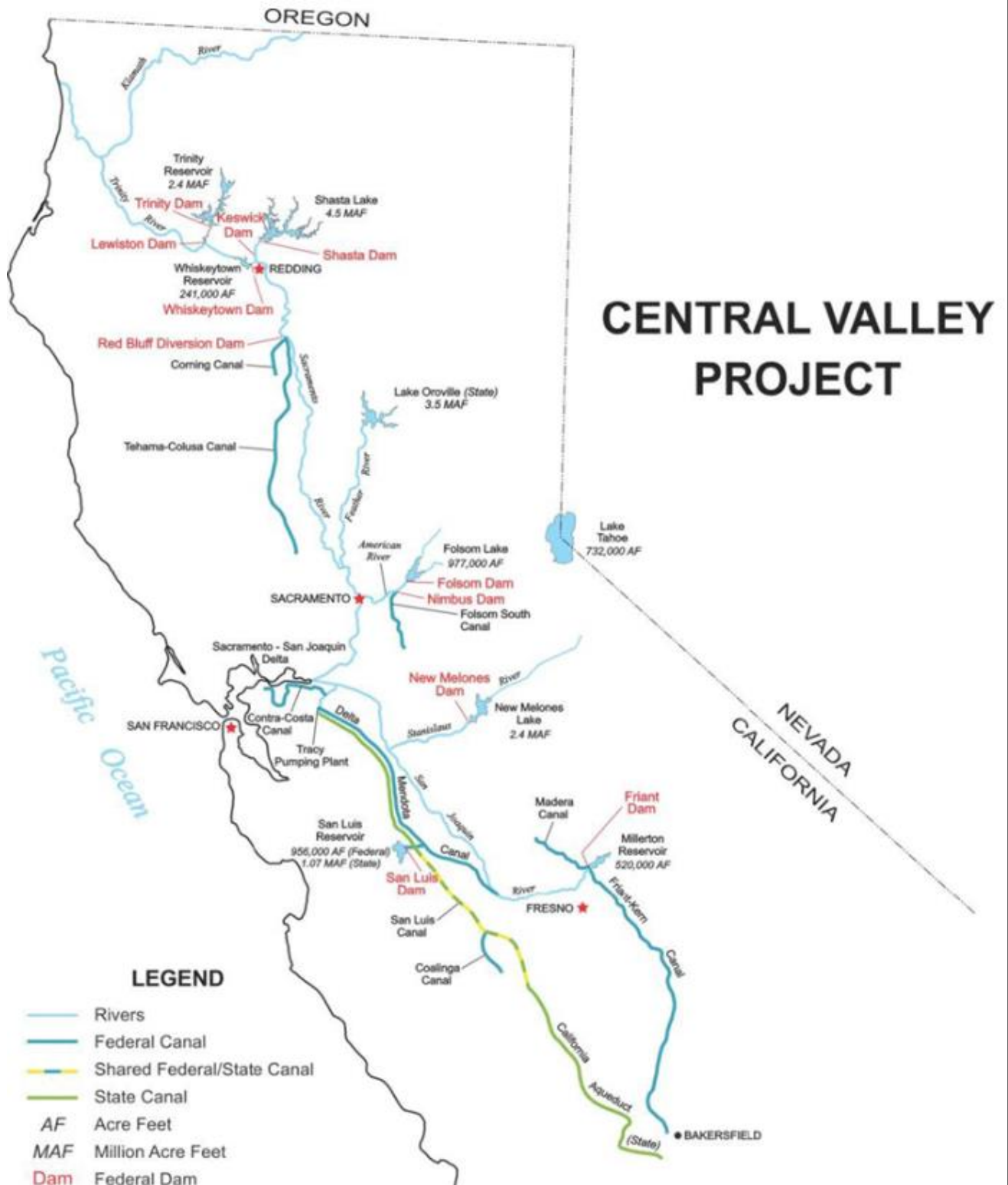
19 71. Today, Delta Smelt are closer to extinction than when they were listed as
20 threatened. Operations of the Water Projects in recent years have resulted in lower survival and
21 record low abundance of Delta Smelt. Recent surveys report unprecedented and historically low
22 abundance levels and confirm that the species is more vulnerable than ever. The population of
23 Delta Smelt has declined so much that the species is "essentially undetectable" in long-running
24 fish surveys in the Delta. The Fish and Wildlife Service's Biological Opinion estimates that the
25 entire adult population was 5,610 Delta Smelt in 2019, the lowest on record.

26 **The Central Valley Project and the State Water Project**

27 72. The Water Projects are among the largest water storage and diversion projects in
28 the country. The area impacted by the Water Projects is vast and includes the following: the

1 Trinity River from Lewiston Dam downstream to its confluence with the Klamath River; Clear
2 Creek from Whiskeytown Dam to the Sacramento River; Spring Creek from the Debris Dam to
3 Keswick Reservoir; the Sacramento River from Shasta Dam to the Delta; the Feather River from
4 Oroville Dam to its confluence with the Sacramento River; the American River from Folsom
5 Dam to the confluence with the Sacramento River; the Stanislaus River from New Melones Dam
6 to its confluence with the San Joaquin River; the San Joaquin River from Friant Dam to the
7 Delta; and the Delta to the Pacific Ocean.

8 73. The Central Valley Project is a federal water storage and diversion project
9 operated by Reclamation. The Central Valley Project alone is one of the largest water projects in
10 the world, annually managing, on average, more than 11 million acre-feet of water, and
11 delivering an average of approximately 7 million acre-feet of water to agricultural, and municipal
12 and industrial consumers. As depicted in the following map, which is reproduced from the
13 Fisheries Service Biological Opinion, the Central Valley Project is comprised of approximately
14 20 dams and reservoirs (including some of the largest water storage and diversion facilities in the
15 State, such as Shasta and Keswick Dams on the Sacramento River; the Trinity Dam on the
16 Trinity River; Whiskeytown Dam on Clear Creek; Folsom Dam on the American River; and
17 Friant Dam on the San Joaquin River), the Tracy Pumping Plant (which draws hundreds of
18 billions of gallons of water per year out of the Delta for export to the Central Valley), and some
19 500 miles of canals, as well as conduits, tunnels, power plants, and related facilities in two major
20 watersheds, the Sacramento River to the north and the San Joaquin River to the south.



74. The State Water Project is a major water storage and diversion project of the State of California that coordinates operations with the Central Valley Project and shares the use of the San Luis Reservoir, among other facilities, with the Central Valley Project. One of the State Water Project's primary components is the Banks Pumping Plant in the south Delta, which pumps water from Clifton Court Forebay into the California Aqueduct. The water then flows from the aqueduct to O'Neill Forebay, and from there a portion is lifted to the joint San Luis Reservoir/Canal, which extends south to the southern end of the San Joaquin Valley. The State Water Project portion of the aqueduct stretches into the south coast region of the state.

History of Consultation on Water Project Operations

75. The history of Section 7 consultation on long-term, joint operations of the Water Projects reaches back to the 1990s. The most recent and currently operative biological opinions were issued by the Fish and Wildlife Service in 2008 ("2008 Biological Opinion") and the Fisheries Service in 2009 ("2009 Biological Opinion"). The 2008 Biological Opinion concluded that the joint operations of the Water Projects would likely jeopardize the continued existence of Delta Smelt and adversely modify its critical habitat. Similarly, the 2009 Biological Opinion concluded that the joint operations of the Water Projects would likely jeopardize the continued existence of winter-run and spring-run Chinook salmon, California Central Valley steelhead, and the distinct population segment of North American green sturgeon, and adversely modify their critical habitats. The Fisheries Service also found that the proposed operations would likely jeopardize Southern Resident killer whales.

76. The 2008 and 2009 Biological Opinions each included a Reasonable and Prudent Alternative that specified terms under which the Water Projects could be operated to avoid causing jeopardy to the species or adversely modifying critical habitat. The Reasonable and Prudent Alternatives included various protective measures, including water temperature requirements, Shasta Reservoir carryover storage requirements, minimum instream flows, limits on Delta pumping to reduce entrainment, increased Delta outflow requirements in certain water year types, requirements to create additional subtidal habitat, and monitoring of ongoing

1 operations, all of which the 2008 and 2009 Biological Opinions determined were required to
2 avoid jeopardizing listed species and adversely modifying critical habitat.

3 77. The 2008 and 2009 Biological Opinions were fully upheld by the United States
4 Court of Appeals for the Ninth Circuit. *See San Luis & Delta-Mendota Water Auth. v. Jewell*,
5 747 F.3d 581 (9th Cir. 2014) (upholding 2008 Biological Opinion concerning Delta Smelt); *San*
6 *Luis & Delta-Mendota Water Authority v. Locke*, 776 F.3d 971 (9th Cir. 2014) (upholding 2009
7 Biological Opinion concerning winter-run and spring-run Chinook salmon, Central Valley
8 steelhead, green sturgeon, and Southern Resident killer whales).

9 78. During California's recent drought, state and federal agencies repeatedly
10 weakened or did not implement important protections for salmon, Delta Smelt, and other listed
11 species, including protections required under the 2008 and 2009 Biological Opinions. In 2014
12 and 2015, endangered winter-run Chinook salmon were nearly entirely wiped out by lethal water
13 temperatures below Shasta Dam, and juvenile spring-run Chinook salmon suffered similarly high
14 mortalities. In addition, multiple surveys of Delta Smelt indicated that the population declined
15 precipitously during the drought, and is now on the brink of extinction.

16 79. On August 2, 2016, Reclamation requested reinitiation of consultation with the
17 Fisheries Service and the Fish and Wildlife Service. In its letters to those agencies, Reclamation
18 stated that the reinitiation request was "based on new information related to multiple years of
19 drought and recent data demonstrating low Delta Smelt populations" and "extremely low listed-
20 salmonid population levels for the endangered winter-run Chinook salmon," as well as "new
21 information available and expected to become available as a result of ongoing work through
22 collaborative science processes." *See* Bureau of Reclamation, Letter to Fish and Wildlife
23 Service Re: Request for Reinitiation of Section 7 Consultation Addressing Coordinated Long-
24 Term Operation of the Central Valley Project (CVP) and State Water Project (SWP) (Aug. 2,
25 2016); Bureau of Reclamation, Letter to National Marine Fisheries Service Re: Request for
26 Reinitiation of Section 7 Consultation Addressing Coordinated Long-Term Operation of the
27 Central Valley Project (CVP) and State Water Project (SWP) (Aug. 2, 2016).

1 80. On August 3, 2016, the Fish and Wildlife Service agreed that “reinitiation of
2 consultation is required under the terms of the 2008 Biological Opinion and the reinitiation
3 regulations, due to multiple dry years and new information.” Fish & Wildlife Service, Response
4 to Request for Reinitiation of Section 7 Consultation Addressing Coordinated Long-Term
5 Operation of the Central Valley Project (CVP) and State Water Project (SWP) (Aug. 3, 2016).
6 The Fish and Wildlife Service “recognize[d] that this new information is demonstrating the
7 increasingly imperiled state of the Delta Smelt and its designated critical habitat, and that
8 emerging science shows the importance of outflows to all life stages of Delta Smelt and to
9 maintaining the primary constituent elements of designated critical habitat.” *Id.*

10 81. Similarly, on August 17, 2016, the Fisheries Service agreed that “reinitiation is
11 required under the terms of the 2009 Biological Opinion and ESA regulations” for reasons
12 including “new information related to the effects of multiple years of drought, recent data
13 demonstrating extremely low abundance levels for endangered Sacramento River winter-run
14 Chinook salmon and threatened Central Valley spring-run Chinook salmon, and new information
15 resulting from ongoing scientific collaboration.” National Marine Fisheries Service, Reinitiation
16 of OCAP Consultation (Aug. 17, 2016).

17 82. On August 30, 2016, then-Interior Secretary Sally Jewell wrote a memo to the
18 President explaining that the reinitiation of consultation likely would lead to new or amended
19 biological opinions *increasing* protections for listed species, and that these new protections
20 would likely reduce water supply from the Delta. The memo found that “[e]ndangered winter-
21 run Chinook are in a . . . perilous state since low water levels and excessive temperatures on the
22 Sacramento River in 2014 and 2015 resulted in the loss of over 90 percent of the population both
23 years.” Secretary Sally Jewell, Memorandum for the President Re: Update on California Water
24 Issues (Aug. 30, 2016). In addition, the memo noted the “downward trajectory of the
25 endangered Delta Smelt, whose population last year hit a record low level, and is down an
26 additional 90 percent this year.” *Id.*

27 83. On January 19, 2017, the Fisheries Service issued a draft amendment to the 2009
28 Biological Opinion that would have immediately strengthened protections for endangered

1 winter-run Chinook salmon regarding water temperature impacts from Reclamation's operations
2 of Shasta Dam. However, Reclamation refused to accept or implement this amendment to the
3 2009 Biological Opinion.

4 **Reclamation's New Proposed Plan to Increase Diversions and Exports**

5 84. Despite the imperiled state of listed species, the known adverse effects of the
6 Water Projects and increased water diversions and exports, and the demonstrated need for
7 increased protections, the current Administration, including the Interior Department and
8 Reclamation, has throughout the consultation process improperly focused on increasing water
9 diversions and exports by the Water Projects and spurning protections for listed species.

10 85. In December 2017, Reclamation issued a notice that it intended to evaluate the
11 effects of alternative operations of the Water Projects. Even though the reinitiation of
12 consultation was required in order to *increase* protections and avoid jeopardy for Endangered
13 Species Act-listed species, Reclamation's notice explained that the purpose of its proposed plan
14 was to "maximize water deliveries and optimize marketable power generation," restore water
15 supply to contractors that was reduced by existing Endangered Species Act protections, and
16 increase operational flexibility. *See* 82 Fed. Reg. 61789. Nowhere in its notice did Reclamation
17 acknowledge that the species were in peril or that, despite the protections offered by the 2008
18 and 2009 Biological Opinions, Water Project operations were causing further decline of the
19 species. *See id.*

20 86. On October 19, 2018, the President of the United States issued a memorandum
21 entitled, "Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in
22 the West." This memorandum identified a policy of minimizing or eliminating regulatory
23 burdens that limit water and power deliveries, directed agencies to suspend or revise regulations
24 or procedures that limit water deliveries, mandated a very short timeline for completion of the
25 consultation, and directed agencies to take the irregular step of designating a single federal
26 official to coordinate and oversee the required Endangered Species Act consultations (as opposed
27 to allowing the Fisheries Service and the Fish and Wildlife Service to oversee their own
28

consultations). Presidential Documents, Promoting the Reliable Supply and Delivery of Water in the West, 83 Fed. Reg. 53961 (Oct. 25, 2018).

87. On January 31, 2019, Reclamation issued its Reinitiation of Consultation Biological Assessment, which set forth and described Reclamation's proposed Water Project operations through at least 2030.⁷ This Biological Assessment stated that the purpose of the proposed operations was "to continue the coordinated long-term operation of the [Central Valley Project and State Water Project] to maximize water supply delivery and optimize power generation . . . and to increase operational flexibility by focusing on non-operational measures to avoid significant adverse effects."

Impacts of Proposed Operations on Listed Species

88. Reclamation's proposed plan would increase water exports and diversions and would dramatically weaken or eliminate many of the protections for threatened and endangered fish mandated by the Fish and Wildlife Service's 2008 Biological Opinion and the Fisheries Service's 2009 Biological Opinion. The proposed plan would kill more Chinook salmon, steelhead, and smelt and further degrade the species' habitat as compared to the 2008 and 2009 Biological Opinions, further reducing the species' survival rates and abundance.

89. Reclamation's proposed plan would result in environmental degradation of the Delta and the Sacramento and San Joaquin River ecosystems, and harm winter-run and spring-run Chinook salmon, Central Valley steelhead, Delta Smelt, and other Endangered Species Act-protected species. Among other specific changes with adverse impacts on fish species, winter-run and spring-run Chinook salmon, Central Valley steelhead, and Delta Smelt would be adversely affected by the following effects of Reclamation's proposed plan:

- a. Entrainment and impingement. Increased water exports from the Delta are achieved by increasing Delta pumping, which will result in increased mortality because Delta Smelt and larval and juvenile winter-run and spring-run Chinook salmon and Central Valley steelhead are often entrained and

⁷ Reclamation amended its proposed plan several more times after issuing its initial Biological Assessment.

1 killed in the pumps. In addition, survival of Delta smelt, and of juvenile
2 winter-run and spring-run Chinook salmon and Central Valley steelhead
3 migrating through the Delta, will be reduced because of increased pumping in
4 the Delta.

- 5 b. Reduced Delta outflow. The proposed Water Project operations will reduce
6 the amount of water that flows through the Delta into the Bay (Delta outflow).
7 Reduced Delta outflow during certain seasons adversely affects the survival
8 and abundance of Delta Smelt and migrating juvenile winter-run and spring-
9 run Chinook salmon.
- 10 c. Failing to provide adequate water temperature. Reclamation's plan eliminates
11 important protections that were required by the 2009 Biological Opinion and
12 intended to ensure adequate cold water to meet temperature requirements, and
13 is likely to result in adverse water temperatures below Keswick Dam and New
14 Melones Dam, and in Clear Creek, among other places, causing adverse
15 impacts on winter-run and spring-run Chinook salmon and Central Valley
16 steelhead.
- 17 d. Increased salinity. By increasing diversions and exports, the proposed plan
18 will allow salt water to intrude further upstream into the Delta, infiltrating the
19 Delta Smelt's habitat. Upstream movement of the low salinity zone is likely
20 to constrict and degrade the habitat of Delta Smelt, reduce survival and
21 geographic distribution, and increase the risk of extinction.
- 22 e. Reduced flows at certain times of year in the Sacramento River and San
23 Joaquin River watersheds. By permitting increased diversions of water from
24 the Sacramento River and San Joaquin River and their tributaries, the
25 proposed operations may at times reduce instream flows available for fish
26 species. This degradation of fish habitat will impact the survival of juvenile
27 salmon and steelhead migrating downstream, as well as the ability of adults to
28 successfully return to upstream spawning areas.

90. The harmful effects of Reclamation's proposed plan, including those described in the preceding paragraph, will significantly threaten the continued existence and recovery of winter-run and spring-run Chinook salmon, Central Valley steelhead, and Delta Smelt, and will adversely affect and modify their designated critical habitat.

The Biological Opinions

91. Following submittal of Reclamation's Biological Assessment, the Fisheries Service and the Fish and Wildlife Service began drafting biological opinions assessing the effects of the proposed Water Project operations plan.

92. In April and July, 2019, the Fish and Wildlife Service circulated portions of its draft biological opinion for independent scientific peer review. Those reviews raised numerous significant concerns, including statements indicating that the plan would degrade Delta Smelt critical habitat, increase the risk of jeopardy, and pose "great peril" for Delta Smelt.

93. Nevertheless, on October 21, 2019, the Fish and Wildlife Service released the Fish and Wildlife Service Biological Opinion authorizing Reclamation's plan. The Fish and Wildlife Service Biological Opinion documents the severe decline of Delta Smelt and the substantial additional adverse impacts that the proposed action would have on Delta Smelt. Despite these findings and the substantial environmental harm that the proposed action would cause, and in contrast to the agency's repeated findings regarding the need for additional species protections, the Fish and Wildlife Service Biological Opinion concludes that the proposed action is not likely to jeopardize listed Delta Smelt or adversely modify or destroy its critical habitat.

94. The Fisheries Service completed a 1,123-page biological opinion on or about July 1, 2019, in which it concluded that Reclamation's plan would jeopardize listed salmon and steelhead, as well as Southern Resident killer whales, and would likely destroy or modify the fish species' critical habitat, in violation of the Endangered Species Act.⁸ The Fisheries Service's analysis identified multiple and significant adverse effects of the proposed action on Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, California Central

⁸ That biological opinion is available online at: <https://www.documentcloud.org/documents/6311822-NMFS-Jeopardy-Biop-2019-OCR.html>.

1 Valley steelhead, and Southern resident killer whales. As a result of these findings, the July 1
2 version of the biological opinion included a reasonable and prudent alternative to Reclamation's
3 proposed action.

4 95. Although the July biological opinion had been signed by multiple staffers and
5 cleared by Fisheries Service attorneys, the Fisheries Service ultimately did not adopt or officially
6 release that opinion. Instead, in response to the July biological opinion's finding that the
7 proposed action would jeopardize listed species, the Trump administration reportedly removed
8 most of the scientists working on the biological opinion and established a team of lawyers and
9 scientists from Reclamation and other agencies to review and revise the biological opinion,
10 deeming the July version a "draft" in need of improvement. *See Bettina Boxall, A report shows*
11 *Trump's water plan would hurt California salmon. The government hid it*, L.A. Times, Aug. 21,
12 2019; Email from Paul Souza Re: Federal Team for CVP and ESA – Meet on Tuesday in
13 Sacramento (July 3, 2019) (attached as Exhibit 1). In addition, the Fisheries Service apparently
14 revoked the existing authority of the Regional Administrator to sign a final biological opinion,
15 reserving that authority to political appointees in Washington, D.C.

16 96. On October 21, 2019, the Fisheries Service released the Fisheries Service
17 Biological Opinion, which was significantly revised from the July 1 version.⁹ The Fisheries
18 Service Biological Opinion documents the severe decline of spring-run and winter-run Chinook,
19 Central Valley steelhead, and Southern Resident killer whales, and the substantial additional
20 adverse impacts that the proposed action would have on those and other species. Despite these
21 findings and the substantial environmental harm that the proposed action would cause, and in
22 contrast to the agency's jeopardy conclusions in the July version of the biological opinion and its
23 repeated findings regarding the need for additional species protections, the Fisheries Service
24 Biological Opinion concludes that the proposed action is not likely to jeopardize listed species or
25 adversely modify or destroy their critical habitat.

26
27 ⁹ Reclamation issued its final Biological Assessment on October 21, 2019, having
28 finalized its proposed action on October 17, 2019, only days before the Biological Opinion was
signed.

1 97. The Fisheries Service Biological Opinion was signed by a political appointee of
2 the Fisheries Service, rather than by the Fisheries Service Administrator for the West Coast
3 region.¹⁰

4 98. Both the Fisheries Service Biological Opinion and the Fish and Wildlife
5 Biological Opinion fail to provide a reasoned explanation between the agencies' findings
6 regarding the status of the species, the demonstrated need for increased protections, and the
7 impacts of the proposed Water Project plan, on the one hand, and the no jeopardy / no adverse
8 modification of critical habitat conclusions on the other hand. In other words, the agencies failed
9 to make rational decisions on the records before them and failed to "articulate[] a rational
10 connection between the facts found and the conclusions made," because the evidence and facts in
11 the record demonstrate that the proposed action would jeopardize listed species and adversely
12 affect their habitat. *See Wild Fish Conservancy*, 628 F.3d at 525 (brackets in original).

13 99. In particular, as described above, the listed species at issue have been in decline,
14 and some are reaching the brink of extinction. The Fisheries Service and the Fish and Wildlife
15 Service agreed that reinitiation of consultation was required under the Endangered Species Act
16 because the dramatic declines these species were suffering despite the protections in the 2008
17 and 2009 Biological Opinions showed that the species required increased protection. But the
18 recently issued Biological Opinions eliminate existing protections for listed species, fail to
19 increase protections for the species, and fail to provide a reasoned explanation why increased
20 protection is not necessary despite earlier findings to the contrary and the Biological Opinions'
21 own findings regarding the imperiled status of the species and the additional adverse effects that
22 the proposed plan will have on those species and their habitat.

23 100. For example, the Fisheries Service Biological Opinion finds that the proposed
24 plan will worsen conditions for salmon and other endangered species as compared to the 2008
25 and 2009 Biological Opinion, but nonetheless concludes that the proposed plan will not cause
26

27 ¹⁰ The Administrator for the West Coast region is a scientist and career civil service
28 staff person, and he (or his designee) is the official who traditionally signs the Fisheries Service
biological opinions concerning operations of the Central Valley Project and State Water Project.

1 jeopardy. For instance, the Fisheries Service Biological Opinion finds that, “Based on the
2 analyses of expected effects of the proposed action to ESA-listed CV Chinook salmon
3 populations, reductions in the survival and productivity of all CV Chinook salmon populations
4 (including fall-run and late fall-run Chinook salmon) are expected to occur throughout the
5 proposed action, and the greatest effects will occur during the drier water years when effects of
6 the proposed action are most pronounced.” Particularly given the imperiled state of the listed
7 Chinook salmon species and the abundant evidence that even the status quo under the prior
8 biological opinion was not adequate to provide the conditions needed to prevent extinction, the
9 Fisheries Service Biological Opinion’s no-jeopardy conclusion is irreconcilable with its findings
10 about the adverse impacts of the proposed plan.

11 101. Similarly, the Fish and Wildlife Service Biological Opinion finds that even
12 without weakening protections for Delta Smelt as authorized by the proposed plan, the
13 population of Delta Smelt is anticipated to decline by 70-100% over the next decade from the
14 record low abundance in 2018. The Fish and Wildlife Service Biological Opinion fails to
15 provide a reasoned explanation why these continued declines would not jeopardize the species
16 under the protections required by the 2008 Biological Opinion, let alone under the weakened
17 protections provided by the newly issued Fish and Wildlife Service Biological Opinion.

18 102. In addition, the Biological Opinions improperly rely on uncertain future
19 mitigation measures without adequate evidence that the mitigation measures are reasonably
20 certain to occur and will be effective to address the adverse impacts that have already been
21 identified to ensure protection of the winter-run and spring-run Chinook salmon and Central
22 Valley steelhead, and their critical habitat (in the case of the Fisheries Service Biological
23 Opinion) and of the Delta Smelt and its critical habitat (in the case of the Fish and Wildlife
24 Service Biological Opinion). For example, protective restrictions on Delta pumping are not
25 reasonably certain to be implemented as they were modeled and analyzed in the Biological
26 Opinions, because the Biological Opinions allow nearly unlimited Delta pumping in excess of
27 those restrictions during any storm event, and real-time management actions to reduce pumping
28 are not certain to occur because of exceptions allowing for increased pumping. The Biological

1 Opinions also fail to address the fact, admitted by the agencies, that some protective
2 requirements are likely to be waived in future droughts, as occurred during the recent drought.

3 103. Next, the Biological Opinions fail to consider and analyze the entire “effects of
4 the action,” thereby significantly underestimating and/or ignoring the adverse effects of the
5 proposal. Among other problems, the Biological Opinions fail to consider both the full extent of
6 the proposed action and the long-term impacts of the proposed operations, particularly long-term
7 impacts in the context of climate change.

8 104. For example, the Water Projects are anticipated to operate for decades to come,
9 and Reclamation’s plan includes full implementation of water supply contracts that run past the
10 year 2040, but the Biological Opinions only analyze effects through the year 2030. The
11 Biological Opinions also fail to model and analyze the effect of full water supply contract
12 deliveries, instead only modeling and analyzing historic deliveries, which are significantly less
13 than the total contract amounts that the Biological Opinions purport to authorize. Increased
14 deliveries up to full contract amounts would result in additional impacts to the species (such as
15 reduced instream flows, reduced Delta outflows, and reduced water storage in upstream
16 reservoirs that would cause additional water temperature impacts) that are not analyzed in the
17 Biological Opinions. Similarly, the Biological Opinions fail to model or analyze the effects of
18 an enlarged Shasta Dam and of the OMR¹¹ storm flexibility rules that are included in the
19 proposed action. The modeling and analyses assume very limited OMR storm flexibility, and
20 more restrictive OMR operations thereafter, than is actually required by the proposed operations
21 and the Biological Opinions, thereby greatly underestimating and failing to analyze the full
22 extent of the adverse effects of the proposed plan’s OMR operating rules.

23
24
25 ¹¹ The Old and Middle Rivers (OMR) are channels of the San Joaquin River as it enters
26 the Delta. Pumping by the Water Projects can result in “reverse” flows in these channels, such
27 that water flows toward the pumps instead of naturally flowing toward the ocean, causing a
28 negative flow rate. Higher pumping levels generally results in higher negative flows, which in
turn increase the probability of fish being entrained and killed in the pumps. OMR rules and
restrictions thus refer to managing the negative flow rate in the OMR by managing the rate of
Delta pumping.

1 105. The Biological Opinions fail to use the best available science as required by
2 section 7(a)(2) of the Endangered Species Act. 16 U.S.C. §1536(a)(2). Among other failures to
3 use the best available science, the Biological Opinions fail to use the best available science for
4 various modeling, the best available science regarding the effects of climate change, and, in the
5 case of the Fisheries Service Biological Opinion, the best available science regarding the effects
6 of Sacramento River flows on survival of migrating salmon.

7 106. For example, the Fisheries Service Biological Opinion admits that it does not use
8 the best scientific data on climate change, instead relying on older climate modeling that
9 underestimates the anticipated effects of increased air and water temperatures resulting from
10 climate change, and which does not account for more frequent or more severe droughts from
11 climate change.

12 107. In addition, the Biological Assessment lacks accurate modeling in several areas
13 that provide the bases for the analysis in the Biological Opinions. Modeling presented in the
14 Biological Opinions is not based on the final version of Reclamation's proposed action, which
15 results in the hydrological models—and all of the biological models which are based on
16 hydrologic models—providing inaccurate results, which likely underestimate the adverse effects
17 on listed species. For instance, the hydrologic modeling does not include the Fall outflow action
18 in the Fish and Wildlife Service Biological Opinion, and fails to accurately model the extent of
19 OMR storm waivers authorized in both Biological Opinions.

20 108. The Biological Opinions further fail to use the best available science regarding the
21 effects of instream flows and Delta outflows. For example, the Fish and Wildlife Service
22 Biological Opinion fails to adequately consider the importance of Delta outflows for the survival
23 of Delta Smelt throughout the year, particularly the proposed reductions in Delta outflows in the
24 winter, spring, summer, and fall. The Fisheries Service Biological Opinion's Winter Run Life
25 Cycle Model also fails to include the published, peer-reviewed research from Fisheries Service
26 scientists documenting the flow-to-survival relationship for juvenile salmon migrating in the
27 Sacramento River.

1 109. Similarly, the Fish and Wildlife Service Biological Opinion fails to use the best
2 available science because it relies on the Enhanced Delta Smelt Monitoring (“EDSM”) program
3 for real time operations, yet independent scientific peer reviews have explicitly concluded that,
4 “resulting abundance and distribution estimates are highly uncertain,” and that “it is difficult to
5 see how the EDSM currently can be used to inform water operations in near real time.”

6 110. The Biological Opinions’ incidental take statements also fail to satisfy the
7 requirements of the Endangered Species Act. The Biological Opinions set incidental take limits
8 at levels that would jeopardize listed species, and fail to provide a reasoned explanation for those
9 levels. The levels of incidental take permitted by the Biological Opinions are also well beyond
10 the levels of take that are actually analyzed and anticipated in the Biological Opinions. In
11 addition, the Biological Opinions fail to ensure that the incidental take limits provide a clear and
12 meaningful trigger for reinitiation of consultation, and they use surrogates for various take limits
13 without adequately justifying the use of such surrogates, despite the Endangered Species Act’s
14 requirement to do so.

15 111. One example of these unlawful take statements is that the Fisheries Service
16 Biological Opinion allows for *three consecutive years* of complete mortality—*zero percent* egg
17 to fry survival of winter-run Chinook salmon below Shasta Dam—before reinitiation of
18 consultation is required. This means that high water temperatures could result in extinction of
19 winter-run Chinook salmon in the wild before reinitiation of consultation would be required,
20 which sets a meaningless reinitiation trigger and would plainly jeopardize the continued
21 existence and recovery of the species.

22 112. In addition, the Fisheries Service Biological Opinion sets incidental take limits,
23 including for Central Valley steelhead, that are completely untethered and independent from the
24 size of the remaining population of the species, meaning take could continue as a species
25 continues to decline, thereby jeopardizing the species.

26 113. Similarly, some take limits in the Fisheries Service Biological Opinion use
27 surrogates that have no clear causal link with take of the listed species, and do so without
28 explaining why it is not practical to express the amount or extent of anticipated take in terms of

1 individuals of the listed species. For instance, the Fisheries Service Biological Opinion fails to
2 justify or articulate a rational connection between using temperature-related mortality of winter-
3 run Chinook salmon as a surrogate for incidental take of spring-run Chinook salmon and Central
4 Valley steelhead. Spring-run Chinook salmon spawn much later in the year, and steelhead
5 spawn at different times and locations. As a result, there is not a causal link between the
6 incidental take limit and the impact on these species.

7 114. The Fish and Wildlife Service Biological Opinion fails to provide a reasoned
8 explanation for eliminating any limit on the number of adult Delta Smelt that can be killed at the
9 pumps and instead using turbidity as a surrogate for take of adult Delta Smelt. This is irrational
10 in part because it is clear that take of adult Delta Smelt occurs even during low turbidity events.

11 115. In addition, the Fish and Wildlife Service Biological Opinion unlawfully defers to
12 the future how to calculate a limit on the number of larval and juvenile Delta Smelt that can be
13 killed at the pumps.

14 **CLAIMS FOR RELIEF**

15 **First Claim for Relief**

16 **Violation of the Administrative Procedure Act, 5 U.S.C. §706**

17 **(Against Defendants Wilbur Ross, Chris Oliver, and the Fisheries Service)**

18 116. Plaintiffs reallege, as if fully set forth herein, each and every allegation contained
19 in the preceding paragraphs.

20 117. The Commerce Secretary's conclusion, in the Fisheries Service Biological
21 Opinion, that Reclamation's proposed long-term operations of the Water Projects will not
22 jeopardize the continued existence of the listed species at issue—winter-run and spring-run
23 Chinook salmon, and Central Valley steelhead—and will not result in the destruction or adverse
24 modification of the species' critical habitat is arbitrary, capricious, an abuse of discretion, and
25 not in accordance with law.

26 118. The Fisheries Service Biological Opinion not only fails to establish the necessary
27 link between the facts found and the conclusions made, but, indeed, is filled with factual findings
28 that contradict its "no jeopardy" conclusions. The Commerce Secretary's conclusion in the

1 Fisheries Service Biological Opinion that the planned operational and other changes to the Water
2 Projects will not jeopardize the continued existence of Central Valley steelhead and winter-run
3 and spring-run Chinook salmon, and will not result in the destruction or adverse modification of
4 their critical habitat, run counter to the evidence before the agencies, are not rationally connected
5 to facts or supported by reasoned explanations, and are pretextual and politically motivated.
6 These conclusions of the Fisheries Service Biological Opinion, therefore, are arbitrary and
7 capricious, an abuse of discretion, and not in accordance with law, in violation of the
8 Administrative Procedure Act, 5 U.S.C. §706(2).

9 119. The Fisheries Service Biological Opinion improperly relies on uncertain future
10 mitigation measures without adequate evidence that the mitigation measures are reasonably
11 certain to occur and will be effective to address the adverse impacts that have already been
12 identified to ensure protection of the winter-run and spring-run Chinook salmon and Central
13 Valley steelhead, and their critical habitat. In relying on these uncertain mitigation measures, the
14 Fisheries Service Biological Opinion violates Section 7(a)(2) of the Endangered Species Act and
15 is arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation of the
16 Administrative Procedure Act, 5 U.S.C. §706(2).

17 120. The Fisheries Service Biological Opinion fails to consider and analyze the entire
18 “effects of the action,” thereby significantly underestimating and/or ignoring the adverse effects
19 of the proposal on fish and wildlife. 50 C.F.R. §402.02. The Fisheries Service Biological
20 Opinion fails to consider both the full extent of the proposed action and the long-term impacts of
21 the proposed operations, particularly long-term impacts in the context of climate change. The
22 failure of the Commerce Secretary, Assistant Administrator for Fisheries, and Fisheries Service
23 (collectively, “Fisheries Service defendants”) to consider all relevant factors, including the full
24 extent and effects of the entire proposed agency action, violates the Endangered Species Act and
25 renders the Fisheries Service Biological Opinion arbitrary, capricious, an abuse of discretion, and
26 not in accordance with law, in violation of the Administrative Procedure Act, 5 U.S.C. §706(2).

27 121. The Fisheries Service Biological Opinion fails to use the best available science as
28 required by Section 7(a)(2) of the Endangered Species Act. 16 U.S.C. §1536(a)(2). In addition,

1 in reaching the no jeopardy / no adverse modification of critical habitat conclusions, the
2 Fisheries Service failed to adequately consider the findings of internal experts, independent peer
3 reviewers, and data regarding the measures necessary to protect the species, without explanation
4 or justification. In reaching the no jeopardy / no adverse modification of critical habitat
5 conclusions, the Fisheries Service disregarded the best available science which demonstrates that
6 the proposed operations are likely to jeopardize the continued existence of the winter-run and
7 spring-run Chinook salmon and Central Valley steelhead and adversely modify and destroy
8 critical habitat. The Fisheries Service defendants' failure to use, and failure to base the Fisheries
9 Service Biological Opinion's conclusions upon, the best available scientific data violated
10 Endangered Species Act Section 7(a)(2) and was arbitrary, capricious, an abuse of discretion,
11 and not in accordance with law, in violation of the Administrative Procedure Act, 5 U.S.C.
12 §706(2).

13 122. The Fisheries Service Biological Opinion's incidental take statements also violate
14 the requirements of the Endangered Species Act and are arbitrary and capricious. The Fisheries
15 Service Biological Opinion sets incidental take limits at levels that would jeopardize listed
16 species, and fails to provide a reasoned explanation why those limits would not jeopardize listed
17 species. The levels of incidental take permitted by the Fisheries Service Biological Opinion are
18 also well beyond the levels of take that are actually analyzed and anticipated in the Biological
19 Opinion. In addition, the Fisheries Service Biological Opinion fails to ensure that the incidental
20 take limits provide a clear and meaningful trigger for reinitiation of consultation, and it uses
21 surrogates for various take limits without adequately justifying the use of such surrogates,
22 despite the Endangered Species Act's requirement to do so. Similarly, some take limits in the
23 Fisheries Service Biological Opinion use surrogates that have no clear causal link with take of
24 the listed species, and do so without explaining why it is not practical to express the amount or
25 extent of anticipated take in terms of individuals of the listed species. The Fisheries Service
26 defendants' inclusion in the Fisheries Service Biological Opinion of incidental take statements
27 that violate multiple requirements of the Endangered Species Act renders the Fisheries Service
28 Biological Opinion and its incidental take statements arbitrary, capricious, an abuse of discretion,

1 and not in accordance with law, in violation of the Administrative Procedure Act, 5 U.S.C.
2 §706(2).

3 123. The analysis, reasoning, and conclusion of the Fisheries Service Biological
4 Opinion, and the Fisheries Service defendants' actions described herein, are arbitrary, capricious,
5 an abuse of discretion, not in accordance with law, in excess of statutory authority, and without
6 observance of procedure required by law, in violation of Endangered Species Act Section 7 and
7 its implementing regulations and the standards of the Administrative Procedure Act, 5 U.S.C.
8 §706.

9 **Second Claim for Relief**

10 **Violation of the Administrative Procedure Act, 5 U.S.C. §706**

11 **(Against Defendants David Bernhardt, Margaret Everson,**
12 **and the Fish and Wildlife Service)**

13 124. Plaintiffs reallege, as if fully set forth herein, each and every allegation contained
14 in the preceding paragraphs.

15 125. The Interior Secretary's conclusion in the Fish and Wildlife Service Biological
16 Opinion, that Reclamation's proposed long-term operations of the Water Projects will not
17 jeopardize the continued existence of the Delta Smelt and will not result in the destruction or
18 adverse modification of the Delta Smelt's critical habitat, is arbitrary, capricious, an abuse of
19 discretion, and not in accordance with law.

20 126. The Fish and Wildlife Service Biological Opinion not only fails to establish the
21 necessary link between the facts found and the conclusions made, but, indeed, is filled with
22 factual findings that contradict its "no jeopardy" conclusion. The Interior Secretary's conclusion
23 in the Fish and Wildlife Service Biological Opinion that the planned operational and other
24 changes to the Water Projects will not jeopardize the continued existence of the Delta Smelt, and
25 will not result in the destruction or adverse modification of its critical habitat, runs counter to the
26 evidence before the agencies, is not rationally connected to facts or supported by reasoned
27 explanations, and is pretextual and politically-motivated. This conclusion of the Fish and
28 Wildlife Service Biological Opinion, therefore, is arbitrary and capricious, an abuse of

1 discretion, and not in accordance with law, in violation of the Administrative Procedure Act, 5
2 U.S.C. §706(2).

3 127. The Fish and Wildlife Service Biological Opinion improperly relies on uncertain
4 future mitigation measures without adequate evidence that the mitigation measures are
5 reasonably certain to occur and will be effective to address the adverse impacts that have already
6 been identified to ensure protection of the Delta Smelt and its critical habitat. In relying on these
7 uncertain mitigation measures, the Fish and Wildlife Service Biological Opinion violates Section
8 7(a)(2) of the Endangered Species Act and is arbitrary, capricious, an abuse of discretion, and not
9 in accordance with law, in violation of the Administrative Procedure Act, 5 U.S.C. §706(2).

10 128. The Fish and Wildlife Service Biological Opinion fails to consider and analyze
11 the entire “effects of the action,” thereby significantly underestimating and/or ignoring the
12 adverse effects of the proposal on fish and wildlife. 50 C.F.R. §402.02. The Fish and Wildlife
13 Service Biological Opinion fails to consider both the full extent of the proposed action and the
14 long-term impacts of the proposed operations, particularly long-term impacts in the context of
15 climate change. The failure of the Interior Secretary, Acting Director of the Fish and Wildlife
16 Service, and Fish and Wildlife Service (collectively, “Fish and Wildlife Service defendants”) to
17 consider all relevant factors, including the full extent and effects of the entire proposed agency
18 action, violates the Endangered Species Act and renders the Fish and Wildlife Service Biological
19 Opinion arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation
20 of the Administrative Procedure Act, 5 U.S.C. §706(2).

21 129. The Fish and Wildlife Service Biological Opinion fails to use the best available
22 science as required by Section 7(a)(2) of the Endangered Species Act. 16 U.S.C. §1536(a)(2).
23 In addition, in reaching the no jeopardy / no adverse modification of critical habitat conclusions,
24 the Fish and Wildlife Service failed to adequately consider the findings of internal experts,
25 independent peer reviewers, and data regarding the measures necessary to protect the species,
26 without explanation or justification. In reaching the no jeopardy / no adverse modification of
27 critical habitat conclusions, the Fish and Wildlife Service disregarded the best available science
28 which demonstrates that the proposed operations are likely to jeopardize the continued existence

1 of the Delta Smelt and adversely modify and destroy critical habitat. The Fish and Wildlife
2 Service defendants' failure to use, and base the Fish and Wildlife Service Biological Opinion's
3 conclusions upon, the best available scientific data violated Endangered Species Act Section
4 7(a)(2) and was arbitrary, capricious, an abuse of discretion, and not in accordance with law, in
5 violation of the Administrative Procedure Act, 5 U.S.C. §706(2).

6 130. The Fish and Wildlife Service Biological Opinion's incidental take statement also
7 violates the requirements of the Endangered Species Act and is arbitrary and capricious. The
8 Fish and Wildlife Service Biological Opinion fails to ensure that the incidental take limits
9 provide a clear and meaningful trigger for reinitiation of consultation, and it uses surrogates for
10 take limits without adequately justifying the use of such surrogates, despite the Endangered
11 Species Act's requirement to do so. The Fish and Wildlife Service Biological Opinion fails to
12 include an incidental take limit for larval and juvenile Delta Smelt, instead deferring the
13 identification of such an incidental take limit to a future process with undefined requirements.
14 The Fish and Wildlife Service defendants' inclusion in the Fish and Wildlife Service Biological
15 Opinion of incidental take statements that violate multiple requirements of the Endangered
16 Species Act renders the Fish and Wildlife Service Biological Opinion and its incidental take
17 statements arbitrary, capricious, an abuse of discretion, and not in accordance with law, in
18 violation of the Administrative Procedure Act, 5 U.S.C. §706(2).

19 131. The analysis, reasoning, and conclusion of the Fish and Wildlife Service
20 Biological Opinion, and the Fish and Wildlife Service defendants' actions described herein, are
21 arbitrary, capricious, an abuse of discretion, not in accordance with law, in excess of statutory
22 authority, and without observance of procedure required by law, in violation of Endangered
23 Species Act Section 7 and its implementing regulations and the standards of the Administrative
24 Procedure Act, 5 U.S.C. §706.

25 **REQUEST FOR RELIEF**

26 WHEREFORE, Plaintiffs respectfully request that the Court:
27
28

- 1 A. Find and declare that the Biological Opinions are arbitrary and capricious, an abuse of
2 discretion, and not in accordance with law, in violation of the Administrative Procedure
3 Act, 5 U.S.C. §706(2).
- 4 B. Hold unlawful and set aside the Biological Opinions, including their Incidental Take
5 Statements.
- 6 C. Order the Secretary of Commerce, the Secretary of the Interior, Assistant Administrator
7 for Fisheries, and the Acting Director of the Fish and Wildlife Service to comply with the
8 law forthwith by withdrawing the Biological Opinions and reinitiating consultation with
9 respect to Reclamation's operation of the Central Valley Project.
- 10 D. Enjoin the Secretaries, their agents, and any other federal officers from taking any other
11 actions in reliance on the Biological Opinions until such time as the Secretaries have
12 complied with the Endangered Species Act and produced lawful biological opinions as
13 ordered by this court.
- 14 E. Retain jurisdiction over this matter until such time as the Secretaries and their agents
15 have fully complied with the Court's order.
- 16 F. Award Plaintiffs their costs of litigation, including reasonable attorneys' fees.
- 17 G. Grant Plaintiffs such further and additional relief as the Court may deem just and proper.
- 18

19 Dated: December 2, 2019

/s/ Barbara J. Chisholm

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